Sent: Wednesday, June 29, 2016 11:29 AM
Subject: Correction of GRIP Dropsondes in Progress

This affects the GRIP DC-8 Dropsonde and the Hurricane and Severe Storm Sentinel (HS3) Global Hawk Advanced Vertical Atmospheric Profiling System (AVAPS) Dropsonde System datasets distributed by GHRC.

Dear GRIP Researchers,
A dry bias in the relative humidity measurements was discovered, this last Spring, in all dropsondes (RD94) and mini-dropsondes (NRD94) collected from 2010 to present. This dry bias is strongly temperature dependent and is considered small at warm temperatures and becomes stronger at cold temperatures. We are in the process of applying a correction to RH measurements contained in all previously QCed dropsonde soundings. GHRC will post a notice on this page and stage the corrected data once is it obtained.

A correction has also been built into a new version of the Atmospheric Sounding Processing Environment software (ASPEN) (https://www.eol.ucar.edu/software/version/33236)

All sounding files corrected for this error will contain a flag, 'TDDryBiasCorr', in the last line of the header to confirm that this correction has been applied. For more information on the dry bias, please access the technical note, linked below, which contains information on the origin, magnitude and impact of the dry bias.

NCAR/EOL Technical Note: Dropsonde Dry Bias
https://www.eol.ucar.edu/system/files/software/Aspen/Windows/W7/documents/Tech%20Note%20Dropsonde_Dry_Bias_20160527_v1.3.pdf

If you have any questions, please feel free to contact Holger Vömel (voemel@ucar.edu) and Kate Young (kbeierle@ucar.edu)

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